4 ways to register:

On-Line:
www.michiganivc.org
with a secure credit card payment.

By Phone:
(517) 394-4614 or
(866) 423-7233

By Mail:
Fill out application below and mail to:
Industrial Ventilation Conference
3315 S. Pennsylvania Ave.
Lansing, Michigan 48910

By Fax:
Fax application to:
(517) 394-1117

Yes!

Enroll me today for the

Industrial Ventilation Conference

February 11-14 • 2008

Kellogg Hotel & Conference Center
Michigan State University
East Lansing, Michigan

4-Day Conference Course
(Feb. 11-14) Fee: $749
Early registration: $700
(before 1/12/08)

Group Rate: 10% discount for four or more people from the same company

Extra Half-Day Troubleshooting Workshop
(Feb. 15) Fee: $99

Conference information
(517) 322-6560

Lodging information
1 (800) 875-5090

Registration Form

Cancellation Policy: An administrative fee of $25 per person will be charged for refund requests received in writing by January 12, 2008. An administrative fee of $200 per person will be charged for refund requests received after January 12, 2008. No-shows will not receive a refund. However, you may send a substitute participant. In the unlikely event of cancellation by the sponsors, liability to the participants is limited to the refund of the registration fee.

On-site Registration: Registration hours at Kellogg Center are 5:00 a.m. to 7:00 p.m. Sunday, February 10. The registration desk will also be open Monday from 7:00 a.m. to 8:30 a.m. For registration information, call (517) 394-4614 or toll-free (866) 423-7233.

Fee: The fee includes all course supplies, refreshments during breaks, and lunches Monday through Thursday. The additional fee for the Friday workshop includes the workshop materials and mid-morning refreshments. Full payment should be made payable in U.S. funds to **Lansing Area Safety Council.** Since class sizes are limited, early registration is suggested.

Location: The conference will be held at the Kellogg Hotel & Conference Center, Michigan State University, East Lansing, Michigan. It is readily accessible from all expressways via US-127 or I-496. Travelers should take Exit 9 onto Trowbridge Road, turn left on Harrison Road, and travel north 3/4 of a mile to the parking ramp adjacent to the center. Free bus transportation will be available between Lansing's Capital City Airport and Kellogg Center on Sunday, February 10 from 3–6 p.m. and again Thursday, February 14 from 5–6 p.m.

Certification Credits: The American Board of Industrial Hygiene has awarded 3.5 Certification Maintenance points to Certified Industrial Hygienists (CIH) who satisfactorily complete this conference.

Please provide the following information:

(If you wish to send more than one person, please duplicate this form.)

Name _____

Title _____

Employer's Name _____

Mailing Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____

E-mail Address _____

Check PROBLEM SESSION desired:
- ❑ **PHASE I** Ventilation System Design
- ❑ **PHASE II** Advanced Ventilation System Design
- ❑ Nonstandard Air Design

Note: If you are unsure about what session level to attend, see the SELF-PLACEMENT QUESTIONNAIRE in this brochure. Level changes can be made on the first day of the conference.

Registration Fee: **Group Rate** for 4 or more people from the same company. Call for details.
- ❑ $749 4-day Conference Course, Monday-Thursday, February 11-14
- ❑ $99 Extra Half-Day Workshop, Friday, February 15
- ❑ $700 **EARLY BIRD REGISTRATION.** 4-day Course paid before January 12, 2008

Payment Method

Charge this registration to: VISA ❑VISA MasterCard ❑MasterCard

Credit Card Number _____

Expiration Date _____

Signature _____

clip page and mail

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Lansing, Michigan 48910

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57th Annual Industrial Ventilation Conference

February 11-14 • 2008

Kellogg Hotel & Conference Center
Michigan State University
East Lansing, Michigan

Four days of advanced training!

Plus an extra half-day Troubleshooting Workshop!

A great value!

Plus, each registration includes:
Eastwood Towne Center coupons and
access to IM West athletic facilities!

Conference Registration (517) 394-4614 or (866) 423-7233
Lodging at the Kellogg Center (800) 875-5090
Further Conference Information (517) 322-6560

Who Should Attend?

Plant Engineers
Industrial Hygienists
Plant Managers
Sheet Metal Contractors
Consulting Engineers
Risk Managers
Anyone involved in ventilation system design, maintenance and performance

Past General Session and Class Comments

"This is one of the two best technical or business conferences I have ever attended in 40 years"

"Good flow, very refined schedule"

"Excellent speakers"

"Abundant information"

Ensure your place in class. Register today!

On Line: **www.michiganivc.org**

By Phone: (517) 394-4614
or (866) 423-7233

Sponsored by

MIOSHA
Michigan Occupational Safety and Health Administration

57th Annual Industrial Ventilation Conference

February 11-14 • 2008

Kellogg Hotel & Conference Center
Michigan State University
East Lansing, Michigan

Four days of advanced training!

Plus an extra half-day Troubleshooting Workshop!

Industrial ventilation experts from across the U.S. and Canada will provide instruction and lectures on the design, construction, use, and testing of ventilation systems. The conference offers an introductory course and two advanced courses of instruction.

Register today!

On Line: **www.michiganivc.org**

By Phone: (517) 394-4614 or (866) 423-7233

Sponsored by MIOSHA

Classroom Sessions

The conference includes more than 20 hours of classroom experience in which the registrant will have the opportunity to work out actual design problems. At least two staff members will lead each classroom design section of about 20 registrants.

Each registrant will receive classroom materials that include the most recent edition of the ACGIH publication *Industrial Ventilation, a Manual of Recommended Practice for Design*, various other technical publications, and plans and specifications for specific ventilation systems to be designed. **Registrants must bring a scientific calculator capable of performing square root and exponent functions for use during classroom sessions. Although not required, bringing a laptop is strongly encouraged.**

Registrants should select the class session that best fits their ventilation design abilities, past experiences, and their goals. To help make a selection, please fill out the *Self-Placement Questionnaire* in this flyer and indicate your selection on the *Registration Form*.

Description of Classes

PHASE I Ventilation System Design This class is intended for participants who have ventilation system maintenance responsibilities. Participants who have had limited prior experience or specific education in ventilation system design or who do not design ventilation systems regularly are also recommended to attend this class. The problems will emphasize fundamentals of airflow in systems, and will include selection of exhaust hoods, determination of air volume and minimum duct velocity, sizing of ducts, calculation of system pressure losses, and selection of fans and air cleaning devices.

PHASE II Advanced Ventilation System Design Participants selecting this class should be thoroughly familiar with exhaust system design procedures or have satisfactorily completed a Phase I Ventilation System Design class at a prior conference.

Nonstandard Air Design This class will deal with exhaust systems that involve elevated air temperatures and/or moisture where air density may vary significantly from standard conditions. Such variations often occur in emission control systems, as well as product drying and cooling applications. Air volume and pressure calculations will be made using psychrometric charts in order to determine duct sizes, fan characteristics, and adequate motor horsepower. Alternative starting schemes to bridge standard to nonstandard conditions will be explored.

Troubleshooting Workshop An optional three-hour session devoted to procedures for troubleshooting a system using the static pressure method.

Lodging

A block of rooms has been reserved at the Kellogg Center. Single occupancy is $94. Shared occupancy is $47 per person. **Call 1 (800) 875-5090 to make reservations.** Requests must be received by January 12, 2008 to guarantee housing priority at the Kellogg Center. If a shared room is requested, please indicate choice of roommate. Kellogg Center reservations will not be held past 6 p.m. unless a guarantee or advance payment is made. Because Kellogg Center housing is limited, reservations are available on a first-come, first-served basis until rooms are filled. Maps and further details will be provided in a registration confirmation letter.

Conference Staff

Nella Davis-Ray
Conference Chairman Emeritus
Michigan Dept. of Labor
and Economic Growth
Lansing, Michigan

William Lykes
Conference Co-chair
Michigan Dept. of Labor
and Economic Growth
Lansing, Michigan

Gregg Grubb
Conference Co-chair
Michigan Dept. of Labor
and Economic Growth
Lansing, Michigan

William Cleary
Ventilation Consulting Services
East Lansing, Michigan

Robert Dayringer
Michigan Dept. of Labor
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Doug Edwards
KBD/Technic, Inc.
Cincinnati, Ohio

James Friedman
AMEC
Minneapolis, Minnesota

Tom Godbey
Donaldson-DCE, Inc.
Louisville, Kentucky

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Michigan Dept. of Labor
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Bill Johnston
Ford Motor Company
Dearborn, Michigan

Dan Josephs
American Air Filter International
Louisville, Kentucky

John Kitching
GM Truck Group
Janesville, Wisconsin

Richard Kline
Consultant
Louisville, Kentucky

Gerhard Knutson
Knutson Ventilation, Inc.
Edina, Minnesota

Gregory Kozak
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Lansing, Michigan

Thomas H. Kroeger
Kirk & Blum
Columbia, Tennessee

Gerry Lanham
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Tim O'Hare
New York Blower Co.
Willowbrook, Illinois

Cynthia Penabaker
GM Worldwide Facilities Group
Pontiac, Michigan

Paul Schmitz
Twin City Fan Companies, LTD
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Robert Shearer
KBD/Technic, Inc.
Cincinnati, Ohio

Raymond Tedford
Schust Engineering, Inc.
McKees Rocks, Pennsylvania

Timothy Theeuwes
Industrial Air Solutions, Inc.
Grandville, Michigan

Richard Vaillancourt
Consultant
Thetford-Mines, Quebec, Canada

Richard Walli
Walli Engineering, Inc.
Oshawa, Ontario, Canada

P. Gaston White
PGW Consulting Services
Birmingham, Alabama

"Instructors were extremely knowledgeable and helpful."

Conference Program

Sunday, February 10

5:00 p.m. – 7:00 p.m.	Registration

Monday, February 11

7:00 a.m.	Registration
8:30 a.m.	Principles of Air Flow
9:45 a.m.	Principles of Hood Design
10:30 a.m.	Classroom Session—Introduction
12:00 p.m.	Lunch
1:00 p.m.	Classroom Sessions
2:15 p.m.	Recirculation of Exhaust Air or Duct Design and Construction
3:30 – 5:00 p.m.	Classroom Sessions
5:30 p.m.	Mathematics Review or Psychrometric Review

Tuesday, February 12

8:00 a.m.	Classroom Sessions
10:00 a.m.	Fan Selection
11:00 a.m.	Classroom Sessions
12:00 p.m.	Lunch
1:00 p.m.	Classroom Sessions
2:15 p.m.	Fan System Effects
3:30 – 5:00 p.m.	Classroom Sessions
5:30 – 7:30 p.m.	Reception for students & staff

Wednesday, February 13

8:00 a.m.	Classroom Sessions
10:00 a.m.	Fan Installation, Operation, and Maintenance or Oil Mist Control Systems
11:00 a.m.	Classroom Sessions
12:00 p.m.	Lunch
1:00 p.m.	Classroom Sessions
2:15 p.m.	Mechanical Collection & Baghouses or Replacement Air
3:30 – 5:00 p.m.	Classroom Sessions

Thursday, February 14

8:00 a.m.	Classroom Sessions
10:00 a.m.	Applied Industrial Ventilation or Scrubbers, ESPs and other Cleaners
11:45 a.m.	Classroom Sessions
12:00 p.m.	Lunch
1:00 p.m.	Classroom Sessions
2:15 p.m.	Stack Design or Strategies for Reducing Energy Use of Industrial Ventilation Systems
3:15 p.m.	Classroom Sessions
5:00 p.m.	Adjourn

Friday, February 15

Optional "Troubleshooting Workshop"
Presented by Gerry Lanham, KBD/Technic and
Doug Edwards, PE, KBD/Technic

8:00 a.m.	Introduction—Needs for maintenance, maintenance scheduling, technical documentation, base-line data at start-up.
8:45 a.m.	Procedure for troubleshooting a system using the static pressure method.
9:45 a.m.	Break
10:00 a.m.	Application of troubleshooting to a familiar problem
10:45 a.m.	Baghouse/Fan Troubleshooting
12:00 noon	Adjourn

"Excellent. This conference has explained many important concepts clearly and simply."

Self-Placement Questionnaire

Registrants should pick the class session that best fits their ability, past experience and their goals in ventilation design. To make a selection, please fill out this *Self-Placement Questionnaire* and indicate your selection on the *Registration Form* on the reverse side. If you have not attended an industrial ventilation conference previously and do not have significant ventilation system design experience, it is **highly recommended** that you attend a **PHASE I** "Ventilation System Design" class (i.e., the introductory-level course).

	Question	Response	Your Score
1.	The number of contaminant control hoods, ductwork, fan,and/or collector systems that I have actually designed (as distinguished from drafting) is:	None 1 One or two 2 Several 3	
2.	When it comes to psychrometric charts, I:	Don't understand 1 Can cope 2 Know it well 3	
3.	Concerning the relationship between VP, SP, and TP, I:	Don't understand 1 Think I understand 2 Know it well 3	
4.	Regarding formal courses in fluid dynamics, fluid flow, and/or hydraulics, I have had:	None 1 One 2 Two or more 3	
5.	I have actually designed make-up air or air conditioning for the following situations:	None 1 Commercial or light industry 2 Heavy industry 3	
		Total Score	

Math or Psychrometric Review

A math and psychrometric refresher will both be held at 5:30 p.m. on Monday night. The math review class will help students with the calculations relevant to industrial ventilation design. The psychrometric review discusses how to chart and defines the terms used on a chart such as dry-bulb, wet-bulb and dew point temperatures, density factor, humid volume, etc.

Please compare your total score with the following table.
We strongly recommend that you attend the type of course identified by the table.

PHASE I Ventilation System Design	0 to 9
PHASE II Advanced Ventilation System Design	10 to 12
Nonstandard Air Design	13 to 15